1 Workload balancing

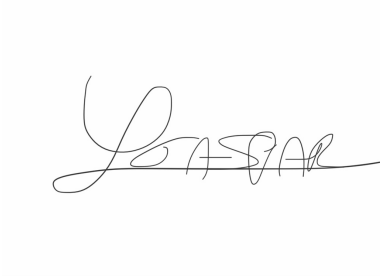
- Nicolas DUJARDIN, s180900 :
  - Study of the plane strain state for the different hardening models.
  - Study of the evolution of the equivalent backstress when the imposed loads evolves from t_{max} to $-t_{max}$.
  - Study of the reason why the equivalent plastic strain ε takes the same value when the imposed load reaches for the first time t_{max}.
  - Study of the problem in Haigh Westergaard's space;
  - Analysis of the influence of the viscosity parameter η and determination of the limit cases.
  - Study of the evolution of the signed distance in Haigh Westergaard's space.
  - Study of the behaviour of the cube for an elasto-viscoplastic model without hardening and with linear isotropic hardening.
  - Study of the evolution of the signed distance for different loading speeds.
  - Study of the evolution of the deformation tensor when the imposed load is kept at a non-zero value.
  - Study of the mixed hardening model when the load is imposed at t_{max} for an infinitely long time.
- Romain GASPAR, s181662 :
  - Study of the plane stress state for the different hardening models.
  - Comparison of the behaviour of the cubes for the different hardening models.
  - Study of the effect of an inverted loading.
  - Study of the plastic dissipation.
  - Analysis the influence of the viscosity parameter η and determination of the limit cases.
  - Determination of the different loadings.
  - Study of the behaviour of the cube for an elasto-viscoplastic model without hardening and with linear isotropic hardening.
  - Study of the evolution of the signed distance for different loading speeds.
  - Study of the sensitivity of numerical parameters.

- Ali SEZGIN, s181400 :
  - Study of the non-linear effects on the different hardening laws.
  - Study of the influence of the dynamic recovery parameters and determination of the limit cases.
  - Study of a non-linear kinematic hardening described by Armstrong-Frederick.
  - Study of Voce's saturated law.
  - Study of the generalized plastic modulus and the effect of the dynamic recovery parameter on it.
  - Study of the influence of the dynamic recovery term in Haigh Westergaard's space and evolution of the yield surface in this space.
  - Determination of the asymptotic value of the backstress tensor and the yield stress and representation of the asymptotic yield surface for different laws.
  - Overall looking of the report.
- Victor MANGELEER, s181670 :
  - Introduction.
  - Supplementary graphs for a better understanding and visualisation.
  - Study of the non-linear effects on the different hardening laws.
  - Study of the influence of the dynamic recovery parameters and determination of the limit cases.
  - Study of a non-linear kinematic hardening described by Armstrong-Frederick.
  - Study of Voce's saturated law.
  - Study of the generalized plastic modulus and the effect of the dynamic recovery parameter on it.
  - Study of the influence of the dynamic recovery term in Haigh Westergaard's space and evolution of the yield surface in this space.
  - Determination of the asymptotic value of the backstress tensor and the yield stress and representation of the asymptotic yield surface for different laws.
  - Help for the study of the sensitivity of numerical parameter.
  - Overall looking of the report.

2 Signatures

- Nicolas DUJARDIN, s180900:
  read and approved, 9 December 2021.

- Romain GASPAR, s181662:
  read and approved, 9 December 2021.



- Ali SEZGIN, s181400:
  read and approved, 9 December 2021.

- Victor MANGELEER, s181670:
  read and approved, 9 December 2021.